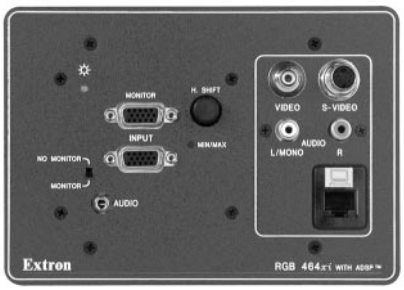
RGB 460xi Series

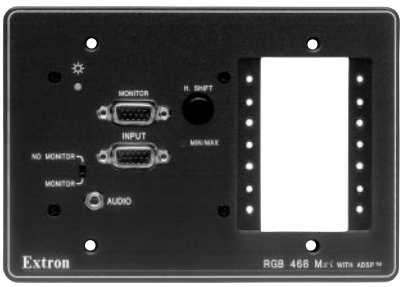
ARCHITECTURAL UNIVERSAL INTERFACES

- 300 MHz (-3dB) RGB video bandwidth
- Advanced Digital Sync Processing (ADSP™)
- Horizontal shift control
- Three position level and peaking control
- Active PC audio interfacing
- Monitor emulation switch
- Digital Display Sync Processing (DDSP™)
- Interfaces install in wall boxes, floor boxes or cable channels
- 9-24 VDC input power compatibility

RGB 460xi



RGB 464xi



RGB 468 Mxi

The Extron RGB 460xi Series includes a complete line of universal, computer-video with audio interfaces. RGB 460xi Series architectural interfaces feature low profile designs and a variety of specialized faceplates that allow for easy installation in many standard-sized wall boxes, floor boxes and other mounting hardware.

DESCRIPTION

The Extron **RGB 460xi Series** are universal, computer video interfaces offering 300 MHz (-3dB) RGB video bandwidth, active PC audio interfacing and Extron's Advanced Digital Sync Processing (ADSP™). ADSP provides all digital processing of sync signals, avoiding the tearing and other image distortions encountered when using poor sync processing methods with digital display devices (DLP, LCD, D-ILA™/LCoS, plasma, etc.).

Each interface is VGA-UXGA compatible and includes the added convenience of a buffered local monitor output. Sync output is DIP switch-selectable for composite video, separate horizontal and vertical sync, and sync on green. Audio interfacing is also included, allowing the input of unbalanced, computer-generated signals to be buffered and converted to balanced, line-level signals. Output connectors are on five BNC pigtails. The low profile design of the Extron RGB 460xi Series interfaces allow for easy installation in many standard-sized wall boxes, floor boxes and other mounting hardware. The RGB 460xi line consists of:

- **RGB 460xi:** Single interface with 15-pin HD input connector that fits into a two-gang wall box
- **RGB 460xi Dual:** Double interface with two 15-pin HD connectors, audio and ADSP that fits into a four-gang wall box
- **RGB 464xi:** Interface with composite video, S-video, RJ-45 pass-through connectors and additional audio inputs that fits into a three-gang wall box
- **RGB 468xi:** Interface with four Architectural Adapter Plate (AAP) openings that fits into a four-gang wall box
- **RGB 468 Mxi:** Three-gang interface with front-mount Mini Architectural Adapter Plate (MAAP) openings for signal pass-through connectors or active control modules
- **RGB 460xi MK:** Interface compatible with two-gang, MK style wall boxes
- **RGB 460xi EC:** Interface compatible with European cable Channel mounting hardware

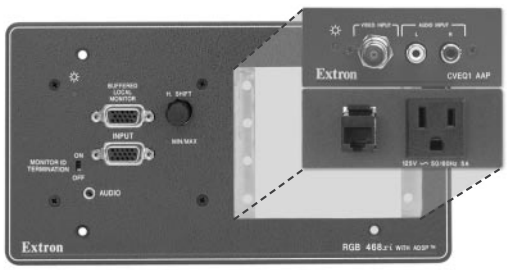
Additional RGB 460 Series Interfaces include RGB 460xi Series interfaces and mounting hardware for installation in Steel City® floor boxes:

- **RGB 460xi SC-AFM 2:** Interface for Steel City AFM 2 floor boxes
- **RGB 460xi SC-AFM 4:** Interface for Steel City AFM 4 floor boxes
- **RGB 464xi SC-AFM 6:** Interface with composite video, S-video and RJ-45 pass-through connectors and additional audio inputs for Steel City AFM 6 floor boxes
- **RGB 468xi SC-AFM 6:** Interface with four single space AAP openings for Steel City AFM 6 floor boxes
- **SC-AFM 8 Mounting Kit:** Mounts any Extron four-gang, three-gang, two-gang, or one-gang product into a Steel City AFM 8 floor box

FEATURES

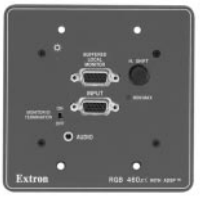
RGB 460xi fits in a standard two-gang box

- **Two-, three-, and four-gang wall box mountable interfaces** – Low-profile enclosures (less than 1" deep) combined with wall mounting plates make for easy installation.
- **High performance compatibility** – 15-150 kHz horizontal frequency range and 300 MHz (-3dB) of RGB video bandwidth.
- **Advanced Digital Sync Processing (ADSP)** – All-digital sync process ensures flawless operation with any LCD, DLP, plasma, or other digital display device.
- **Horizontal picture centering** – Allows the input signal to be shifted horizontally for a properly centered image on the display device.
- **9-24 VDC** – Accepts power from a wide range of sources.
- **Level/Peaking** – A three position level/peaking switch allows for adjustment of image brightness and sharpness. This feature provides compensation for signal loss due to cable length, capacitance, and system bandwidth losses.
- **Adjustable vertical sync pulse width** – Choice of narrow or wide (default) sync pulse widths for greater compatibility with both CRT and digital displays.
- **Selectable sync polarity** – Sync polarity may be output in the same format as it is input or converted to negative polarity for separate horizontal and vertical sync.
- **Active PC audio to balanced audio interfacing** – Unbalanced computer-generated audio is input via a 3.5 mm mini jack (and two RCA connectors on the RGB 464xi) and output as balanced line level audio on captive screw connector(s).
- **MAAP options** – The RGB 468Mxi accommodates up to four single space MAAPs. Dozens of passive MAAPs are available with popular audio, video, control and computer connectors. Active MAAP modules are available for power, control, video line driving, audio buffering and twisted pair transmission.
- **AAP options** – The RGB 468xi and RGB 468xi SC-AFM 6 are able to accommodate up to four single space AAPs. Extron offers hundreds of AAP options and configurations to choose from, including a wide array of pass-through connections.

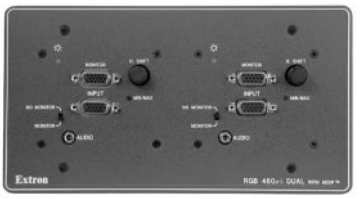


The Extron CVEQ1 AAP & AC Net AAP are two of the many optional control/pass-through modules that can be installed into the AAP openings of the RGB 468xi

RGB 460xi & RGB 460xi Dual



RGB 460xi



RGB 460xi Dual

The Extron RGB 460xi is a universal, analog computer-video interface with a two-gang faceplate. The Extron RGB 460xi Dual consists of two discrete interfaces mounted on one four-gang faceplate.

MODEL	PART #
RGB 460xi (gray)	60-373-01
RGB 460xi (black)	60-373-02
RGB 460xi (white)	60-373-03
RGB 460xi Dual (gray)	60-373-11
RGB 460xi Dual (black)	60-373-12
RGB 460xi Dual (white)	60-373-13
RGB 460xi FSR	60-333-40

RGB 460xi Series– MK & Euro Channel

RGB 460xi MK

RGB 460xi (EC)
European Cable Channel

The Extron RGB 460xi MK can be mounted into any two-gang MK wall box with a minimum depth of 47 mm commonly used in the UK, Singapore, and Australia. The Extron RGB 460xi EC and RGB 468xi EC are compatible with European cable channel mounting hardware.

MODEL	PART #
RGB 460xi MK (black & white included)	60-467-01
RGB 460xi MK (unfinished)	60-467-51
RGB 460xi EC (white)	60-373-10

RGB 464xi

RGB 464xi

RGB 464xi top view

The Extron RGB 464xi is a universal, analog computer-video interface designed to fit in a three-gang wall box. It features an RJ-45 network connection and provides pass-through connections for composite video and S-video. RCA audio inputs and a 3.5 mm mini jack connector for active audio interfacing are also included.

MODEL	PART #
RGB 464xi (gray)	60-374-01
RGB 464xi (black)	60-374-02
RGB 464xi (white)	60-374-03

RGB 468xi

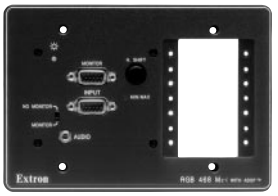
RGB 468xi

RGB 468xi top view

The Extron RGB 468xi is a universal, analog computer-video interface designed to fit in a four-gang wall box. It includes a 3.5 mm mini audio jack and four openings for Architectural Adapter Plates (AAPs) that can be populated with signal pass-through connectors or active modules.

MODEL	PART #
RGB 468xi (gray)	60-375-01
RGB 468xi (black)	60-375-02
RGB 468xi (white)	60-375-03

RGB 468 Mxi



RGB 468 Mxi

The RGB 468 Mxi is a universal analog computer-video interface designed to fit in a three-gang wall box. It includes a 3.5 mm mini jack and four openings for MAAPs that can be populated with signal pass-through connectors or active modules.

MODEL	PART #
RGB 468 Mxi (black)	60-591-02
RGB 468 Mxi (white)	60-591-03

RGB 460xi SC-AFM 2

RGB 460 xi SC-AFM 2

The Extron RGB 460xi SC-AFM 2 is a special version of the RGB 460xi architectural interface that installs in a Steel City AFM 2 floor box.

MODEL	PART #
RGB 460xi SC-AFM 2 (gray)	60-463-01

RGB 460xi SC-AFM 4

RGB 460 xi SC-AFM 4

The Extron RGB 460xi SC-AFM 4 is a special version of the RGB 460xi architectural interface that installs in a Steel City AFM 4 floor box.

MODEL	PART #
RGB 460xi SC-AFM 4 (gray)	60-464-01

RGB 464xi SC-AFM 6 & RGB 468xi SC-AFM 6

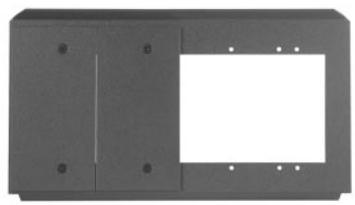
RGB 464xi SC-AFM 6

RGB 468xi SC-AFM 6

The Extron RGB 464xi SC-AFM 6 and RGB 468xi SC-AFM 6 are special versions of the RGB 464xi and RGB 468xi architectural interfaces that install in Steel City AFM 6 floor boxes.

MODEL	PART #
RGB 464xi SC-AFM 6 (gray)	60-465-01
RGB 468xi SC-AFM 6 (gray)	60-466-01

SC-AFM 8 Mounting Kit



SC-AFM 8 Mounting Kit

The Extron SC-AFM 8 is a mounting kit for Steel City AFM 8 floor boxes. It can accommodate any Extron four-gang, three-gang, two-gang, or one-gang faceplate. With added flexibility, the SC-AFM 8 can support such products as Extron RGB 460xi, RGB 464xi, or RGB 468xi interfaces, as well as the Extron TP T 460 Twisted Pair Transmitters and assorted Extron AAPs.

MODEL	PART #
SC-AFM 8 Mounting Kit (gray)	70-203-01

VIDEO

Gain ..... Unity (0.7V), 15% with 3dB peaking (0.8V), 30% with 6dB peaking (0.9V)
Bandwidth ..... 300 MHz (-3dB)

VIDEO INPUT AND LOOP THROUGH

Number/signal type
  RGB 460xi Dual ..... 2 analog RGBHV, RGBS, RGsB
  All other models..... 1 analog RGBHV, RGBS, RGsB
Connectors
  RGB 460xi/460xi EC/464xi/468xi
    (1) 15-pin HD female buffered input connector and
    (1) 15-pin HD female local monitor loop through connector
  RGB 460xi Dual ..... (2) 15-pin HD female buffered input connectors and
    (2) 15-pin HD female local monitor loop through connectors
Nominal level ..... 0.7V p-p for RGB
Minimum/maximum levels ..... Analog: 0.3V to 1.45V p-p with no offset at unity gain
Impedance ..... 75 ohms or Hi Z, switchable (set to 75 ohms if no local monitor is connected)
Horizontal frequency..... 15 kHz to 150 kHz (optimum: 15 kHz to 62 kHz)
Vertical frequency ..... 30 Hz to 170 Hz
Return loss ..... <-30dB @ 5 MHz

VIDEO OUTPUT

Number/signal type
  RGB 460xi Dual ..... 2 separate analog RGBHV, RGBS, RGsB
  All other models..... 1 analog RGBHV, RGBS, RGsB
Connectors
  RGB 460xi Dual ..... 2 x 5 BNC female on 2" to 2.5" cables
  All other models..... 5 BNC female on 2" to 2.5" cables
Nominal level ..... 0.7V p-p for RGB
Minimum/maximum levels ..... Analog: 0.7V to 0.9V p-p (switch selectable) w/peaking and 0.7V p-p input
Impedance ..... 75 ohms
Return loss ..... -30dB @ 5 MHz

SYNC

Input type..... Autodetect RGBHV, RGBS, RGsB (accepts RGsB but does not strip from video)
Output type ..... RGBHV: at all times
RGBS: switch selectable
RGsB: switch selectable or pass-through
Input level..... 2.0V to 5.5V p-p with +0.2VDC offset max.
Output level ..... 4.0V to 5.0V p-p, unterminated
Input impedance ..... 510 ohms
Output impedance ..... 75 ohms
Max propagation delay..... 52 ns
Max rise/fall time ..... 2.5 ns
Polarity ..... Positive or negative

AUDIO — ALL MODELS

Gain ..... Unbalanced output: 0dB; balanced output: +6dB
Response..... 20 Hz to 20 kHz, ±0.5dB
THD + Noise..... 0.03% @1 kHz, 0.3% @ 20 kHz at nominal level
S/N..... >90dB at rated maximum output (14dBu), balanced
Stereo channel separation..... >90dB @ 1 kHz to 20 kHz

AUDIO INPUT — RGB 464xi

Number/signal type ..... 2 stereo, unbalanced, 20 Hz to 20 kHz
Connectors ..... Ch. 1: 3.5 mm stereo female jack (2 channel), unbalanced; tip (L), ring (R), sleeve (ground)
Ch. 2: 2 RCA female jacks
Impedance ..... >5 kohms unbalanced, DC coupled
Nominal level ..... -10dBV (316mV)
Maximum level..... +8.5dBu (unbalanced) at 1%THD+N

AUDIO INPUT — RGB 460xi, RGB 460xi EC, RGB 468xi, RGB 468xi EC, RGB 460xi Dual

Number/signal type
  RGB 460xi Dual ..... 2 separate, stereo, unbalanced, 20 Hz to 20 kHz
  Other models..... 1 stereo, unbalanced, 20 Hz to 20 kHz
Connectors
  RGB 460xi Dual ..... (2) 3.5 mm stereo female jacks (2 channel), unbalanced; tip (L), ring (R), sleeve (ground)
  Other models..... 3.5 mm stereo female jack (2 channel), unbalanced; tip (L), ring (R), sleeve (ground)
Impedance ..... >5 kohms unbalanced, DC coupled
Nominal level ..... -10dBV (316mV)
Maximum level..... +8.5dBu (unbalanced) at 1%THD+N

AUDIO OUTPUT — RGB 464xi

Number/signal type ..... 2 buffered, stereo (2 channel), balanced/unbalanced
Connectors..... 3.5 mm captive screw connector, 5 pole
Impedance ..... 50 ohms unbalanced, 100 ohms balanced
Gain error..... ±0.1dB channel to channel
Maximum level (600 ohm) ..... +14dBm, balanced at stated %THD+N

AUDIO OUTPUT — RGB 460xi, RGB 460xi EC, RGB 468xi, RGB 460xi Dual

Number/signal type
  RGB 460xi Dual ..... 2 separate, buffered, stereo (2 channel), balanced/unbalanced
  Other models..... 1 buffered, stereo (2 channel), balanced/unbalanced
Connectors..... 3.5 mm captive screw connector, 5 pole
Impedance ..... 50 ohms, unbalanced, 100 ohms balanced
Gain error..... ±0.1dB channel to channel
Maximum level (600 ohm) ..... +14dBm, balanced at stated %THD+N
NOTE: 0dBu = 0.775 volts (RMS).

GENERAL

Power ..... 100VAC to 240VAC, 50/60 Hz, 5 watts, external, autoswitchable; to a 9 to 24VDC, 0.20 A power supply. Product requires 0.2 A (minimum). (A 12VDC, 1 A power supply is included.)
Rack mount ..... No
  RGB 460/464 SC models ..... Steel City AFM floorbox mountable
  RGB 460xi MK ..... MK box mountable
  All other models..... Wall or furniture mountable

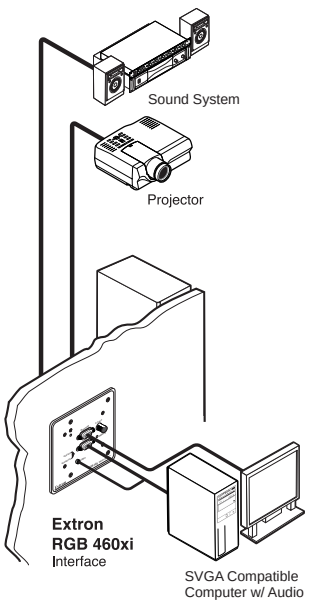
Specifications are subject to change without notice.

SPECIFICATIONS (CONT.)

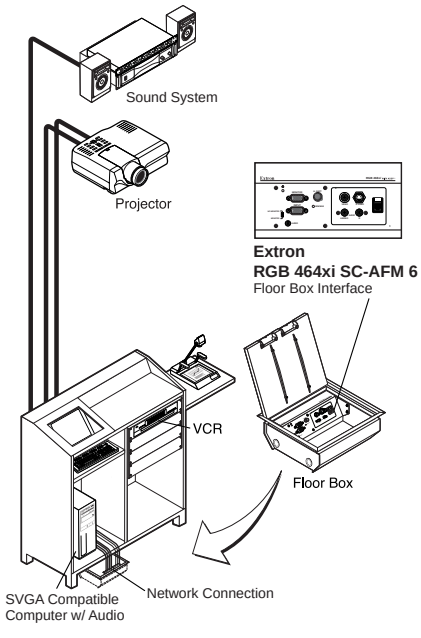
Enclosure type ..... Metal
Enclosure dimensions
RGB 460xi faceplate ..... 4.5" H x 4.6" W x 0.1" D (2 gang)
(11.4 cm H x 11.7 cm W x 0.3 cm D)
RGB 460xi MK faceplate..... 3.4" H x 5.7" W x 0.1" D
(8.6 cm H x 14.5 cm W x 0.3 cm D)
RGB 464xi faceplate ..... 4.5" H x 6.4" W x 0.1" D (3 gang)
(11.4 cm H x 16.3 cm W x 0.3 cm D)
RGB 468xi/RGB 460xi
Dual faceplate ..... 4.5" H x 8.3" W x 0.1" D (4 gang)
(11.4 cm H x 21.2 cm W x 0.3 cm D)
RGB 460 EC faceplates..... 3.2" H x 4.4" W x 0.1" D
(8.0 cm H x 11.2 cm W x 0.3 cm D)
RGB 460xi SC-AFM2 faceplate ..... 2.9" H x 3.5" W x 0.1" D
(7.4 cm H x 8.9 cm W x 0.3 cm D)
RGB 460xi FSR faceplate ..... 2.9" H x 3.53" W x 0.1" D
(7.4 cm H x 9.0 cm W x 0.3 cm D)
RGB 460xi SC-AFM4 faceplate ..... 2.9" H x 5.8" W x 0.1" D (7.4 cm H x 14.7 cm W x 0.3 cm D)
RGB 464xi SC-AFM6, RGB 468xi SC-AFM6 faceplate
2.9" H x 8.9" W x 0.1" D
(7.4 cm H x 22.6 cm W x 0.3 cm D)
Interface enclosure for all models
(RGB 460xi Dual includes two enclosures)
2.7" H x 3.3" W x 1.0" D (6.9 cm H x 8.4 cm W x 2.8 cm D) (Depth excludes front panel connectors and controls.)

Enclosure dimensions
SC-AFM8 adapter plate..... 4.4" H x 9.4" W x 0.1" D
(11.2 cm H x 23.9 cm W x 0.3 cm D)
Product weight
RGB 460xi SC-AFM2,
RGB 460xi FSR ..... 0.5 lbs (0.3 kg)
RGB 460xi SC-AFM4,
RGB 464xi SC-AFM6,
RGB 468xi SC-AFM6 ..... 0.8 lbs (0.4 kg)
SC-AFM8 ..... 0.6 lbs (0.3 kg)
RGB 460xi ..... 0.5 lbs (0.2 kg)
RGB 460xi MK ..... 0.5 lbs (0.2 kg)
RGB 464xi, RGB 468xi ..... 0.7 lbs (0.3 kg)
EC models ..... 0.7 lbs (0.3 kg)
RGB 460xi Dual ..... 1.0 lbs (0.5 kg)
Shipping weight (all models) ..... 3 lbs (1.4 kg)
Vibration..... ISTA/NSTA 1A in carton (International Safe Transit Association)
Listings ..... UL, CUL
Compliances..... CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF ..... 30,000 hours
Warranty ..... 3 years parts and labor

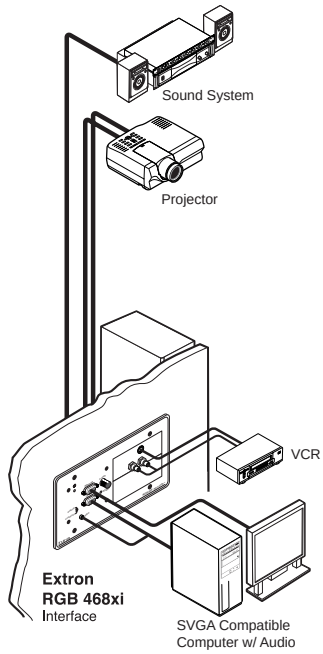
APPLICATION DIAGRAMS



RGB 460xi
The RGB 460xi fits into a two-gang wall box



RGB 464xi SC-AFM 6
Designed for Steel City floor boxes



RGB 468xi
The RGB 468xi can be populated with four AAPs for additional flexibility

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